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Field Crops
Alberta
AGRICULTURE

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Varietal Description of Viva Field Bean

Origin and breeding

Viva, tested as 5R-119 and 6R-47, was developed by the Agricultural Research Service, U.S. Department of Agriculture, Prosser, Washington, U.S.A. This variety was derived by back-crossing the F_1 progeny of UI-35 x P.I. 203958 to UI-35. The resulting F_1's were then crossed with Sutter Pink. The initial crosses took place between 1960-1965 selecting for resistance to bean common mosaic virus. The seed was maintained by pedigree selection until the F_8 generation when a single plant was selected to form the parental material of Viva. Breeder seed was first bulked in 1974.

Varietal characteristics

Growth habit: indeterminate; semi-vining

Leaves: small; wrinkled; dull medium green

Stems: light green vines and short runners; wiry

Flowers: white

Pods: scattered; smooth; light to medium green turning yellowish as they mature

Seeds: pink; uniform; small; hilum view is elliptical; side view is oval; rounded ends; oval to elliptical cross-section; hilum is whitish

Plant height: intermediate

Maturity: earlier than UI 111

Disease reaction: U.S. data indicate that Viva is resistant to common type and NY 15 strains of bean mosaic virus; curly top virus and rust *(Uromyces phaseoli); moderately resistant to Fusarium root rot (Fusarium oxysporum)*; susceptible to Sclerotinia rot *(Sclerotinia sclerotiorum)*

Performance

Viva is an early maturing variety with good yield potential that is well adapted to the bean production areas of Alberta and Manitoba.

Maintenance of breeder seed

Washington State Crop Improvement Assoc. Inc., Yakima Washington

Idaho Crop Improvement Association, Boise, Idaho

Canadian representative

Alberta Wheat Pool

Canadian distributor

Public

Recommended by

Western Expert Committee on Grain Breeding

Copies of this and related publications may be obtained from the Print Media Branch, Alberta Agriculture, 7000 - 113 Street, Edmonton, Alberta T6H 5T6 or Alberta Agriculture's District Offices.

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Table 1. Agronomic performance of Viva and check varieties, Alberta Field Bean Trials, 1984-1987*

Variety	Type	Station Years	Maturity (days)	Yield (kg/ha)	Harvest Index (%)	1000 seed wt. (g)
Viva	Pink	21	106.7	3064.5	52.0	269.8
Seafarer	Navy	19	105.9	2227.2	49.0	199.4
OAC Seaforth	Navy	6	108.2	2321.8	46.0	209.8
Kentwood	Navy	7	113.0	1461.3	—	200.6
Northland	Navy	7	101.1	1671.0	52.0	171.4
UI 111	Pinto	20	111.0	2344.8	50.5	357.1

*Brooks and Bow Island

Table 2. Agronomic performance of Viva and check varieties, Manitoba Field Bean Trials, 1984-1987*

Variety	Type	Station Years	Yield (as % of Seafarer)	Maturity (days)	1000 seed wt. (g)
Viva	Pink	13	130.0	101.1	248
Seafarer	Navy	14	100.0	96.4	185
Ex Rico 23	Navy	14	103.5	103.4	180
OAC Seaforth	Navy	8	105.5	101.5	184
Fleetwood	Navy	8	103.6	103.2	171

*Winnipeg, Brandon, Morden and Portage la Prairie
NOTE: Seafarer yield = 1703 kg/ha

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